AR 55-80 OPNAVINST 11210.1B AFR 75-88/MCO 11210.2C DLAR 4500.19

ARMY REGULATION
No. 55-80
OPNAV INSTRUCTION
No. 11210.1B
AIR FORCE REGULATION
NO. 75-88
MARINE CORPS ORDER
NO. 11210.2C
DEFENSE LOGISTICS AGENCY
REGULATION No. 4500.19

DEPARTMENTS OF THE ARMY,

THE NAVY, AND THE AIR FORCE,

AND

AND

THE DEFENSE LOGISTICS AGENCY

WASHINGTON, DC, 15 December 1982

#### TRANSPORTATION AND TRAVEL

#### HIGHWAYS FOR NATIONAL DEFENSE

This revision identifies changes in military organizations; explains various traffic engineering services; incorporates new procedures for requesting traffic engineering studies on DD Form 2265 (Highway Safety Standards Report); revises the procedure for submitting DD Form 2265; changes a mandatory 5-year reporting cycle of highway systems needs reports to whenever appropriate; and also incorporates new procedures for reporting highway design, construction, and maintenance implementation at all DOD installations. Local limited supplementation of this regulation is permitted but is not required. If supplements are issued, staff agencies and major commands will furnish two copies of each to the Commander, Military Traffic Management Command, ATTN: MT-SA, WASH DC 20315. Other commands will furnish one copy of each to the next higher headquarters.

Interim changes to this regulation are not official unless they are authenticated by The Adjutant General. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

			Paragraph	Page
CHAPTER	1.	GENERAL		
Section	I.	General		
		Purpose	1-2	1-1
		Applicability	1-2	1-1
		References	1-3	1-1
		Explanation of terms	1-4	1-1
		Coordinating policy on highways		
		for national defense matters	1-5	1-1
		Policy on exceeding limitations of		
		public highways	1-6	1-1
		Evaluation of public highways	1-7	1-2
		Policy on development and maintenance		
		of public highways	1-8	1-2
		Rights-of-Way	1-9	1-2
		Air highway clearance	1-10	1-2
		Public highway construction and improvements $\dots$	1-11	1-2

	Funding for construction and repairs	1-12	1-3		
	Processing damage claims	1-13	1-3		
	Highway safety program	1-14	1-3		
II.	Responsibilities				
	Assistant Secretary of Defense (ASD)	1-15	1-3		
	Department of the Army	1-16	1-3		

\*This regulation supersedes AR 55-80/OPNAVINST 11210. 1A/AFR 75-88/MCO 11210.2B/DLAR 4500.19, 3 January 1978.

i

# 15 December 1982

# AR 55-80/OPNAVINST 11210. IB/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

		Paragraph	Page
	Department of the Navy	1-17	1-5
	Department of the Air Force	1-18	1-6
	Directors of Defense agencies	1-19	1-7
	Heads of DLA field activities	1-20	1-7
	National Guard Bureau	1-21	1-7
CHAPTER 2.	HIGHWAY SYSTEM, ACCESS ROAD, AND REPLACEMENT ROA	D NEEDS	
Section I.	Highway System Needs		
	General	2-1	2-1
	Coordination	2-2	2-1
	Strategic highway corridor network	2-3	2-1
	Highway system needs reports (RCS MTMC-74)	2-4	2-1
II.	Access Road Needs		
	General	2-5	2-2
	Impact on highway construction or improvement .	2-6	2-2
	Agency share of highway cost	2-7	2-2
	Reports and investigations of highway facilities	2-8	2-3
	Coordination	2-9	2-3
	Access road needs report (RCS MTMC-75)	2-10	2-3
	Who will prepare reports	2-11	2-3
	Report preparation and channels	2-12	2-3
	Information to be included in reports	2-13	2-4
	Where to send reports	2-14	2-6
	Funding	2-15	2-6
III.	Replacement Road Needs		
	General	2-16	2-6
	Procedures and Funding	2-17	2-6
CHAPTER 3.	MANEUVER-AREA ROADS		
	Maneuver-area road condition report (RCS MTMC-76)		3-1
	Who will prepare report	3-2	3-1
	When to send report	3-3	3-1
	Certification of maneuver area	3-4	3-1
	Funding	3-5	3-1
4.	SPECIAL DEFENSE USE OF PUBLIC HIGHWAYS		
	General	4-1	4-1
	Military vehicle-highway relationships	4-2	4-1
	Special military movements	4-3	4-1
	Emergency highway traffic regulation	4 - 4	4-1
5.	HIGHWAY TRAFFIC ENGINEERING		

		General	5-1	5-1
		Traffic engineering services	5-2	5-1
		Installation support of traffic engineering		
		services	5-3	5-2
		Traffic Engineering Needs Report	3 3	3 2
		(DD Form 1948) (RCS MTMC98(R1))	5-4	5-2
		Publications on solving highway problems	5-4 5-4	5-2
	_		5-4	5-4
	6.	HIGHWAY SAFETY PROGRAM STANDARDS 12 AND 13		
Section	I.	Requirements		
		General	6-1	6-1
		Highway safety plans	6-2	6-1
		Manpower development plan	6-3	6-1
		Traffic control device plan	6-4	6-2
		Uses of accident data	6-5	6-2
	II.	Implementation and Evaluation		
		General	6-6	6-2
		Highway safety program standard 12	6-7	6-3
		Highway safety program standard 13	6-8	6-3
		Highway Safety Standards Report (DD Form 2265)		
		(RCS MTMC150)	6-9	6-3
		Funding	6-10	6-4
		runaring	0-10	0-4
ii				
			15 Decembe	er 1982
AFR 75-	88/MC	O 11210.2C/DLAR 4500.19		
				Page
APPENDI	X A.	OFFICES OF THE DIVISION ADMINISTRATORS, FEDERAL		
		HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORT	'ATION	A-1
	в.	REFERENCE PUBLICATIONS ON SOLVING HIGHWAY PROBLE	MS	
		(BIBLIOGRAPHY)		B-1
GLO	SSARY			ssary 1
				-
				iii

CHAPTER 1. GENERAL

AR 55-80/OPNAVINST 11210.1B/

AFR 75-88/MCO 11210.2C/DLAR 4500.19

\_\_\_\_\_\_

15 December 1982

#### Section I. GENERAL

1-1. Purpose. This regulation prescribes policies and procedures on matters pertaining to Department of Defense highway needs, and when appropriate to the highway needs of other Federal agencies, during peacetime and emergencies in the United States and its territories. It provides information on highway system needs, Defense access road needs, special Defense use of public highways, highway traffic engineering needs and services, and the Defense highway safety program. This regulation implements section 210, title 23,

United States Code, DODD 5160.60 of 26 April 1973, DODD 1000.3 of 29 March 1979, and DODI 6055.4 of 7 November 1978.

- 1-2. Applicability. This regulation applies to Active Army, Navy, Air Force, and Marine Corps, as well as to the Army, National Guard and the Army Reserve.
- 1-3. References. Related publications are listed below.
- AFR 11-7. (Air Force Relations with Congress).
- AFR 127-7. (Highway Traffic Safety Program).
- AR 55-162/OPNAVINST 4600.11D/AFR 75-24/MCO 4643.5C/DLAR 4540.8. (Permits for Oversize, Overweight, or Other Special Military Movements on Public Highways in the United State).
- AR 70-44/OPNAVINST 4600.22B/AFR 80-18/MCO 4610. 14C/DLAR 4500.25. (DOD Engineering for Transportability).
- AR 190-5/OPNAVINST 11200.5B/AFR 125-14/MCO 5110.1B/DSAR 5720.1. (Motor Vehicle Traffic Supervision).
- AR 210-4. (Personnel Parking Facilities Program and DA Ridesharing Program).
- AR 335-15. (Management Information Control System).
- AR 385-55. (Prevention of Motor Vehicle Accidents).
- AR 420-10. (Facilities Engineering: General Provisions, Organization, Functions, and Personnel.
- DODD 4165.62 (DOD Implementation of Personnel Parking Facilities Program).
- MIL STD 1366. (Material Transportation System Dimensional and Weight Constraints, Definition of).
- OPNAVINST 5100.12A. (Navy Traffic Safety Program, Promulgation of).
- 1-4. Explanation of terms. See glossary.

#### 1-5. Coordinating policy on highways for national defense matters.

- a. A single DOD agency will represent and coordinate highways for national defense matters with the Federal Highway Administration (FHWA), Department of Transportation; American Association of State Highway and Transportation Officials; and with other appropriate Government and non-Government agencies. This agency will obtain information and assistance from DOD components, and request the same from other Federal agencies. (This is subject to requirement control approval (AR 335-15).)
- b. To insure that the national defense is served by adequate, safe, and efficient highways, DOD will do the following.
- (1) Integrate the highway needs of the national defense into the civil highway programs of State and Federal agencies.
- (2) Consider the design of military vehicles in relation to use of public highways.
- (3) Cooperate with State and Federal agencies on defense use of public highways and in planning their development and construction.
- 1-6. Policy on exceeding limitations on public highways. Movements on public highways, bridges, and tunnels (including toll facilities) will not exceed legal limitations, or subject highway users to unusual hazard, without prior permission from the State. local, or toll authorities. If getting normal clearance would delay a mission during an emergency, a movement may be made before permission is received. However, appropriate State authorities will be informed first. The Service responsible for the movement will provide

# AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

15 December 1982

Deputy Chief of Staff

for Manpower and

Reserve Affairs

warning lights, vehicles, or other devices to protect other highway users, or block the highway if needed. Emergency movement may be made under the conditions below:

- a. In response to a military contingency or mobilization requirement.
- b. When a theater of operations is established within the United States.
- c. In conducting warfare before establishing a theater of operations.
  - d. In response to major hazards from accidents caused by moving dangerous materials
  - e. In conducting operations because of domestic disturbances or natural disasters
- 1-7. Evaluation of public highways. The FHWA will, on request from MTMC, evaluate the public highway needs of military installations and activities. It will provide for preparing engineering plans and estimates and construction and maintenance of public roads to meet defense needs.
- 1-8. Policy on development and maintenance of public highways. State and local governments will develop and maintain public highways for normal and continuing traffic generated by defense installations or activities the same as for other traffic. Military installations or activities any public highway except as dated in paragraph 1-12.
- 1-9. Rights-of-way. When rights-of-way, including control of access, on the National System of Interstate and Defense Highways (NSIDH) are needed over military reservations, the installation commanders and agencies will cooperate with the Secretary of Transportation (23 USC 107(d)). Commanders will arrange to give the State or other person constructing the projects on such lands adequate rights-of-way and control of access from adjoining lands. Installation commanders may get advice and assistance on rights-of-way from the proper Federal Highway Division Administrator (app A). Unresolved problems will be referred to the Commander, MTMC, through official channels.
- 1-10. Air highway clearance. a. Installation commanders and agencies will comply with 23 USC 318 for air highway clearance requirements. Section 318, title 23, United States Code provides-

"Federal highway funds should not be used for reconstruction or relocation of any highway giving access to an airport constructed or extended after December 20, 1944, or for the reconstruction or relocation of any highway which has been or may be closed or the usefulness of which has been or may be impaired by the location or construction of any airport constructed or extended after December 20,1944, unless prior to such construction or extension. as the case may be. the state highway department and the Secretary of Transportation have concurred with the officials in charge of the airport that the location of such airport or extension thereof and the

consequent reconstruction or relocation of the highway are in the public interest."

- b. Compliance with the above statute where military airports (bases, air stations, airfields etc.) and public highways are concerned requires joint consideration of the airway-highway problems involved by officers having charge of the military air facilities, officials of the Federal Highway Administration, and other appropriate highway officials. The object of the joint consideration is to-
  - (1) Eliminate existing conflicts in airway and highway clearance.
- (2) Assure that no new conflicts will be introduced through relocation or construction of either facility in the foreseeable future.
- (3) Assure that, as a consequence of contemplated airport or highway changes, unnecessary use of Federal funds for either or both facilities will be avoided.
- (4) Assure that the final plan agreed upon will be in the public interest.
- c. Problems will be referred to Commander, MTMC, ATTN: MT-SA, Washington, DC 20315.
- 1-11. Public highway construction and improvements. a. National Guard. Regarding public highway construction and improvements for National Guard Bureau installations and activities, the following will apply:
- (1) Public highway construction or improvements required because of the following will come under the Defense Access Road Program:
- (a) Federally financed projects for the State national guard when the facilities will be federally-owned, or

1-2

#### 15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

- (b) The replacement of highways resulting from projects under (a) above.
- Note. If the National Guard project is of nonmilitary local benefit. State or local normal highway financing must pay a pro rata share of the cost.
- (2) The following will not be paid from defense funds. It is the State's obligation to provide an adequate site and access for the facility project.
- (a) Public highway construction or improvement solely related to Federal financed facilities projects for a State national guard when the facility will be State-owned, or
- (b) The replacement of highways resulting from these projects in (a) above.
- b. Financing. During peacetime, construction or improvement of public highways serving privately-owned and operated Defense industries will not be financed with defense access road funds.
- 1-12. Funding for construction and repairs. The Military Construction Appropriation Acts will include all requirements for (construction and upgrading) defense access roads. Air Force will include all requirements for

extraordinary maintenance in the Operations and Maintenance Act. Maneuver road repairs will be paid from maneuver funds.

- 1-13. Processing damage claims. Installation commander will process claims for damage to public highways caused by installation operations through normal claims channels. This does not include maneuvers or the construction of classified installations or facilities for ballistic missiles.
- 1-14. Highway safety program. DOD will implement highway safety program standards that apply to federally administered areas. Procedures in 23 CFR 1230 will be followed.

#### Section 11. RESPONSIBILITIES.

- 1-15. Assistant Secretary of Defense (ASD). ASD (Manpower, Reserve Affairs and Logistics) will provide policy guidance to the Department of the Army in carrying out assigned functions.
- 1-16. Department of the Army (DA). a. Assistant Secretary of the Army (Installations, Logistics, and Financial Management) (ASA (IL&FM)). ASA (IL&FM) will make the determination required by 23 USC 210(h) that construction estimates and bids of contractors did not include allowances for repairing damage to highways used in constructing Army classified installations and facilities for ballistic missiles.
- b. The Commander, Military Traffic Management Command (MTMC). Commander, MTMC will-
- (1) Act as the single manager for military traffic, land transportation, and common-user ocean terminals for DOD in carrying out the following responsibilities assigned to the Secretary of the Army.
- $\it (a)$  Coordinate the Defense transportation interest in public highways. Integrate foreseen
- DOD highway needs and operational requirements into the highway programs of the United States, its territories, and possessions.
- (b) Coordinate the implementation of 23 USC 210(h) within DOD and with the FHWA and other Government and non-Government agencies. (This pertains to damage of highways used in construction classified ballistic missile sites.)
- (c) Review and analyze Defense accessroad needs. When appropriate, include those of other Federal agencies as pertain to approved transportation engineering practices, statutory provisions, and policies and procedures of the FHWA, Department of Transportation.
- (d) Represent DOD in matters on highways to serve the national defense. This will be coordinated with the FHWA, the American Association of State Highway and Transportation Officials, and other appropriate Government and non-Government agencies.
- (e) On behalf of the SECDEF, inform the proper Government agency of the public highway needs of DOD and, if necessary, the needs of other Federal agencies. Certify that the highway is important to the national defense. (Certification is made according to 23 USC 210.)
- (f) Advise and help DOD components to prepare and justify budget requirements for Defense access road needs, and to transfer funds to FHWA appropriated for this purpose.

#### AFR 75-88/MCO 11210.2C/DLAR 4500.19

- (g) Advise and help the ASD(C) to prepare and justify budget requirements for defense access road needs, and to transfer funds to FHWA appropriated for this purpose.
- (h) Insure State and Federal standards are considered in the development of design for military vehicles to be used on public highways.
- (i) Represent DOD in highway traffic engineering matters. This will be in coordination with Federal, State, and local highway agencies. Provide high-way traffic engineering services to DOD components, when requested.
- (j) Insure that DOD and State highway authorities coordinate special defense use of public highways.
- (k) Coordinate Highway Safety Program Standards (HSPS) 12 and 13 within DOD and with the Federal Highway Administration and other Government and non-Government agencies.
- (2) For DA, act on highways for national defense matters. Get concurrence of the DA staff agencies in their areas of interest.
- c. The Deputy Chief of Staff for Operations and Plans (DCSOPS), DA.

  DCSOPS will determine for the Department of the Army the relative strategic importance of highways. This will be in coordination with the Commander, MTMC.
- d. The Deputy Chief of Staff for Logistics (DCSLOG), DA. DCSLOG will advise and make recommendations to the Commander, MTMC for DA, in public highway matters. DCSLOG will also-
  - (1) Determine the relative logistical importance of highways for the DA.
  - (2) Help to develop policy on highways for national defense matters.
  - e. Chief of Engineers (COE). COE will-
- (1) Program and budget for defense access road requirements of the DA in the Military Construction Program. Transfer of funds from DA to the FHWA will be according to the certifications of public highway needs by the Commander, MTMC.
- (2) Program and budget for HSPS 12 and 13 requirements of DA in the Military Construction Program.
  - (3) Implement HSPS 12 within DA. (See chap 6.)
- f. All major Army commands. They will inform the Commander, MTMC, of changes at military installations that will greatly affect the following:
- (1)  $Public\ highways$ . MTMC will coordinate the changes with FHWA and States involved.
- (2) Travel flow conditions on installation roads. MTMC will review the plans for new or modified transportation and traffic generating facilities and advise of potential adverse impact.
  - g. CG, US Army Forces Command (FORS-COM). FORSCOM will-
- (1) Coordinate with the Commander, MTMC, on highways for national defense matters. Send information copies to HQDA (DALO-TMSP) WASH DC 20310:
- (2) Review highway system, access road, traffic engineering needs, and HSPS reports of FORSCOM installations and activities in compliance with chapters 2, 5, and 6.
- (3) Include in the program and budget for maneuvers and exercises the funds for surveys, improvements, extraordinary maintenance, and repair of maneuver area roads. Insure that maneuver area road reports are prepared and funds are transferred to the FHWA (chap 3).
- (4) Insure that the field implements approved highway traffic regulations and procedures for emergency use of public highways by DOD agencies. FHWA develops these in coordination with the Commander, MTMC.
- (5) Coordinate the emergency highway traffic regulation (EHTR) interest of all defense installations and activities. Provide assistance required by

chapter 4.

- (6) Get permits for oversize, overweight, or other special military movements on public highways within area of responsibility (AR 55-162/OPNAVINST 4600.11D/AFR 75-24/MCO 4643.5C/DLAR 4540.8).
  - (7) Insure that HSPS 12 and 13 are implemented (chap 6).
- h. CG. US Army Trairnng and Doctrine Command (TRADOC), US Army Western Command, and US Arrny Military District of Washington (MDW). They will-
- (1) Maintain liaison with Commander, MTMC, on highways for national defense matters. Send information copies of liaison to HQDA(DALO-TMSP) WASH DC 20310 and to FORSCOM (AFEN-FEB), Fort McPherson, GA 30330.

1 - 4

#### 15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

- (2) Review highway system. access road, traffic engineering needs, and HSPS reports of the installations and activities under their commands for compliance with chapters 2, 5, and 6.-
- (3) Follow provisions of AR 55-162/OPNAVINST 4600.11D/AFR 75-24/MCO 4643.SC/DLAR 4540.8 oil military movements over public highways within areas of responsibility.
  - (4) Insure that HSPS 12 and 13 are implemented (chap 6).
  - i. CG, US Army Health Services Command (HSC). HSC will-
- (1) Coordinate with the Commander, MTMC, on highways for national defense matters. Send information copies of liaison to HQDA (DALO-TMSP) WASH DC 20310.
- (2) Review highway system, access road, traffic engineering needs, and HSPS reports of command installations and activities for compliance with chapters 2, 5, and 6.
- j. CG, US Army Materiel Development and Readiness Command (DARCOM). DARCOM will-
- (1) Coordinate highways for national defense matters with Commander, MTMC. Send information copies of liaison to HQDA (DALO-TMSP) WASH DC 20310.
- (2) Review highway system, access road, traffic engineering needs, and HSPS reports of command installations and activities for compliance with chapters 2, 5, and 6.
- (3) Follow the provisions of AR 5-162/OPNAVINST 4600.IID/AFR 75-24/MCO 4643.SC/DLAR 4540.8 on permits for oversize, overweight, or other special military movements on public highways within area of responsibility.
  - (4) Insure that HSPSs are implemented (chap 6).
- k. Combat developers. They will insure that requirements documents include guidance when vehicle size or weight exceeds the criteria in MIL-STD- 1366.
  - 1. Commanders of Army installations or activities. They will-
- (1) Prepare highway system, access road, traffic engineering needs, and HSPS reports according to chapters 2, 5, and 6.
- (2) Follow provisions of AR 55-162/OPNAVINST~4600.11D/AFR~75-24/MCO~4643.5C/DLAR~4540.8 on permits for oversize, overweight, or other special military movements on public highways within their areas of responsibility.
- (3) Send an information copy of correspondence to public officials or civic organizations on the location, construction, or improvement of a public highway through the major Army command (MACOM), to the Commander, MTMC, ATTN: MT-SA, Washington, DC 20315
- (4) Set up a program to reduce traffic accidents through the application of traffic/transportation engineering principles and the use of recognized national

standards (including uniform standards for traffic control). Report status to MTMC (chap 6).

- (5) On request, help to man and train personnel assigned to implement plans by the EHTR of the CONUS armies according to chapter 4.
- 1-17. Department of the Navy. a. The Commander, Naval Facilities Engineering Command (NAVFAC), will act for the Department of the Navy as follows:
  - (1) Coordinate with the Commander MTMC, on highway matters.
- (2) Send complete data to the Commander MTMC, on current and potential access road highway system, and highway traffic engineering needs. Include the status of HSPS 12 and 13 implementation.
- (3) Coordinate the provision of public highway transportation facilities to serve new or expanded military installations or activities matters with Commander. MTMC.
- b. The Commander, NAVFAC will administer and manage all aspects of highway system needs, defense access road needs, and highway traffic engIneering needs and services. These include implementing HSPS 12 and 13 for the Department of the Navy; the programing, budgeting, and approving of defense access and replacement road requirements; and the reviewing and sending of traffic engineering reports and requests. Transfer of funds from the Department of the Navy to the FHWA will be according to certifications of public highway needs by the Commander, MTMC.

1-5

1-5

# AR 5580/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

15 December 1982

- c. All commands and offices of the Department of the Navy, district commandants, other intervening commands, and activity commanding officers and officers in charge will act as follows.
- (1) Prepare reports for highway system needs, access road needs, and HSPS 12 and 13 and requests for highway traffic engineering services, according to chapters 2, 5, and 6.
- (2) Send an information copy of correspondence to public officials or civic associations on the locations, construction, or improvement of a public highway to the Commander, NAVFAC.
- (3) Identify changes taking place at military installations that will affect public highways to the Commander, MTMC (through proper channels). MTMC will coordinate the changes with the States involved.
- (4) On request, help to man and train personnel assigned to implement the EHTR plans of the CONUS armies according to chapter 4.
- d. Chief of Naval Operations will make determinations as to strategic highway system needs. The Chief of Naval Operations, the Commandant of the Marine Corps, and the Commander, Naval Supply Systems Command, will make certain determinations for special defense use of public highways. The Commander, Naval Safety Center will make certain determinations for highway safety. Official liaison and other aspects of highways for national defense other than routine ones should be coordinated with the Commander, MTMC, through the Commander, NAVFAC.
- e. The Commander. NAVFAC, will insure that construction estimates and bids of contractors did not include allowances for repairing damage to highways used in the construction of classified Navy installations and facilities for ballistic missiles (23 USC 210(h)).

- 1-18. Department of the Air Force. a. The Deputy Assistant Secretary (Installations) will insure that construction estimates and contractors bids did not include allowances for repairing damage to highways used in the construction of classified Air Force installations and facilities for ballistic missiles if the provisions of 23 USC 210(h) are to be used.
- b. The Director of Transportation, Office of the Deputy Chief of Staff, Logistics & Engineering will-
  - (1) Maintain liaison with the Commander, MTMC.
- (2) Act for the Department of the Air Force on all matters of highway system needs and special defense use of public highways.
- c. The Director of Engineering and Services, Headquarters, US Air Force, Office of the Deputy Chief of Staff Logistics & Engineering will-
  - (1) Maintain liaison with the Commander, MTMC.
- (2) Act for the Department of the Air Force on matters of defense access road needs.
  - (3) Program and budget for defense access road requirements.
- (4) Transfer funds from the Department of the Air Force to the FHWA according to the certain certifications of public highway needs by the Commander. MTMC.
  - d. Headquarters Air Force Engineering and Services Center (HQ AFESC) will-
    - (1) Maintain official liaison with Commander, MTMC.
- (2) Act on highway traffic engineering services and HSPS 12 and 13 implementation matters.
- (3) Set up a program to reduce traffic accidents through the application of traffic transportation engineering principles and the use of recognized national standards. Report status to MTMC (see chap 6).
  - e. Headquarters Strategic Air Command will-
- (1) Coordinate the Minuteman extraordinary maintenance requirements and progam.
  - (2) Program and budget for Minuteman extraordinary maintenance requirements.
  - f. Commanders of major Air Force commands will-

1-6

#### 15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

- (1) Review highway system needs, access road needs, and HSPS 12 and 13 reports and requests for highway traffic engineering services of their installations for accuracy, clarity, and compliance with chapters 2, 5, and 6.
- (2) Send HQ USAF(AF/LEE) a copy of correspondence with public officials or members of Congress on access roads. The correspondence with members of Congress will be in addition to that required by the Chief of Legislative Liaison, Office, Secretary of the Air Force (AFR 11-7).
- (3) Identify to Commander, MTMC, changes taking place at military installations that will greatly affect public highways. MTMC will coordinate the changes with States involved.
  - g. Commanders of US Air Force installations or activities will-
- (1) Prepare highway system needs, access road, and HSPS 12 and 13 reports and requests for highway traffic engineering services according to chapters 2, 5, and 6. Send requests for traffic engineering studies through the proper major command to HQ AFESC/DEM. On request, help to man and train personnel assigned to implement the EHTR plans of the CONUS armies (chap 4).
- (2) Send an information copy of correspond ence to public officials or civic organizations on the location, construction, or improvement of a public highway to HQ USAF/LEEE.

## 1-19. The Directors of Defense agencies. They will-

- a. Maintain liaison with the Commander, MTMC, on highways for national defense matters.
- b. Review highway system, access road, traffic engineering, and HSPS 12 and 13 reports of their installations for accuracy and compliance with this regulation.
- c. Program and budget for Defense access road requirements of their respective agency in the military construction program.
- d. Transfer funds to the FHWA according to the certifications of public highway needs by the Commander, MTMC.
- e. Send copies of correspondence to public officials or civic organizations on the location, construction. or improvement of a public highway to the Commander, MTMC, ATTN: MT-SA, Washington, DC 20315.

# 1-20. Heads of Defense Logistics Agency (DLA) field activities. They will-

- a. Prepare highway systems needs, access road needs, and HSPS 12 and 13 reports and requests for traffic engineering services according to chapters 2, 5, and 6.
- b. Send copies of correspondence to public officials or civic organizations on the location, construction, or improvement of a public highway to the Director, DLA, ATTN: WI.

#### 1-21. National Guard Bureau (NGB). NGB will insure the following:

- a. The Chief, NGB will-
- (1) Maintain official liaison with the Commander, MTMC, on highways for national defense matters.
- (2) Determine the extent of local benefit to be derived from Federally financed facilitiests. (See para 1-Ila(1).)
- (3) When appropriate, direct the commanders of National Guard installations or activities to prepare highway system needs, access road needs, and HSPS 12 and 13 reports according to chapters 2, 5, and 6.
- (4) Review highway system needs, access road needs, and HSPS 12 and 13 reports of their installations for accuracy, clarity, and compliance with chapters 2, 5, and 6.
- (5) Program and budget for defense access road requirements of the NGB in the military construction program.
- (6) Transfer funds from the NGB to the FHWA according to the certifications of public highway needs by the Commander, MTMC.
- b. Commanders of National Guard installations or activities will send an information copy of correspondence to public officials or civil organizations on the locations, construction, or improvement of a public highway to the Chief, NGB.

1-7

15 December 1982

AR 5580/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

# CHAPTER 2

# HIGHWAY SYSTEM, ACCESS ROAD, AND REPLACEMENT ROAD NEEDS

## Section I. HIGHWAY SYSTEM NEEDS

2-1. General. National defense highway needs are generally accomplished under regular public highway programs. Title 23 of the US Code, administered by the

FHWA, provides for a Federal Aid Highway Program to assist the States in highway construction and improvement. Title 23 allows the Secretary of Transportation to give priority consideration to including highway needs that are important to national defense into the Federal Aid Highway Program. These needs are cited by the Commander, MTMC, who represents the Secretary of Defense, and is the executive agent for coordinating DOD highway system requirements with civil highway authorities and the American Association of State Highway and Transportation Officials.

- **2-2.** Coordination. a. Army installation or activity commanders will send their strategic highway system needs to the proper major Army command. The following will recommend their strategic highway system needs to the Commander, MTMC:
- (1) US Army Forces Command (including senior Army commanders Alaska, US Army Western Command, Defense Complex Panama, and Puerto Rico).
  - (2) US Army Training and Doctrine Command.
  - (3) US Army Materiel Development and Readiness Command.
  - (4) The Military District of Washington.
  - (5) US Army Health Services Command.
- b. Comments and recommendations of commanding officers of Navy activities and commanders of Air Force installations will be processed through command channels to the proper Naval district or major Air Force command. Then they will be sent to either the Commander, Engineering and Services Center (HQ AFESC) before sending needs to MTMC.
- 2-3. Strategic Highway Corridor Network (STRAHNET). a. STRAHNET is a network of highway corridors important to national defense. It is coordinated with civil highway authorities to insure that the Nation's highway system meets defense needs. The National System of Interstate and Defense Highways and other strategically important highway corridors are included in STRAHNET.
- b. When Commander, MTMC, requests, the military services will review STRAHNET to insure that it is current. Also, when mission changes generate travel demands that public highways cannot meet, Service commands and installation commanders will document their needs so that the STRAHNET can be revised. Recommendations for additions, deletions, or revisions to STRAHNET will be submitted using Requirement Control Symbol (RCS) MTMC74 reports.
- 2-4. Highway system needs reports (RCS MTMC-74). a. Military Services will send their highway system needs, whenever appropriate, to the Commander, MTMC, (para 2-3b and b below). Deficiencies in highway systems, which are not being corrected by the responsible civil authorities, will be identified to the Commander, MTMC. The reports may either be complete or may include only recommendations for new or revised STRAHNET requirements. Normally installation facilities engineers will prepare RCS MTMC-74 reports after coordinating with installation, safety, and other officials.
  - b. Highway system needs reports include-
- (1) Recommendations for designating of highway corridors important to national defense. These corridors need not contain existing routes. They will be recommended because of strategic value or major transportation importance to national

2-1

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19 15 December 1982

installations, corridors that are circumferential to urban areas, and connections to major air and ocean terminals will be considered. Justification will include items such as a narrative report on mission, types of equipment, and frequency of movements. It will be supported by a map showing the route. Recommendations on access roads serving defense installations and activities will not be included in this report. They will be reported as prescribed in section II of this chapter.

- (2) Present or foreseen functional or operational deficiency of any specific segment of a highway. (Include items such as traffic congestions, indirect routing, excessive grades, low vertical clearances, and narrow bridges.)
- (3) Description of unusual characteristics of vehicles (such as excess width, height, length, weight) which will use any segment of highway.
- (4) Identification of highway bridges and tunnels of major strategic importance. (These structures will be selected based on military value without regard to State or local recommendations.)
- c. The Navy or the Air Force will report existing or foreseen highway system needs that may adversely affect the performance of an assigned Defense mission to the Commander, MTMC.
- d. The Commander, MTMC, will prepare (and coordinate) DOD's defense highway requirements from highway system needs reports and other sources. Requirements will be sent to civil highway authorities for inclusion in the civil highway program.

#### Section II. ACCESS ROAD NEEDS

- 2-5. General. a. State and local highway agencies will develop and maintain adequate highways to serve permanent Defense installations the same as for other traffic generators. Defense generated traffic produces about the same road-user taxes per vehicle mile of travel as does other traffic. Thus, highway improvements near a permanent installation will receive consideration and treatment as State and local improvement programs are developed. Defense installations will wait for highways to be improved using normal priority order. All highway needs under the jurisdiction of the highway agency will be considered. 2-6. Impact on highway construction or improvement. Defense installations or activities may cause unusual impacts on requirements for construction or improve-
- ment of highways in the area. Generally, they are related to the following: a. The established of a new Defense installation or activity, the major expansion of an existing one, or the addition of a new gate.
- b. Short duration requirements for a public highway that cannot be justified as a part of a regular highway program.
- c. Low type township or county roads that require prompt major improvements for Defense generated traffic.
- d. Rehabilitation of public highways (not to include routine or periodic maintenance) required solely for unusual Defense generated traffic.
  - e. Replacement and maneuver area roads mentioned in chapters 2 and 3.
- 2-7. Agency share of highway cost. a. The Defense Access Road Program provides a means for Defense agencies to pay their fair share of the cost to improve highways to installations and activities. Normally, the Defense agency or the military department makes funds available from Military Construction Appropriations Acts (General Support Programs). Defense access road funds will not be considered for highway maintenance except under extraordinary circumstances. Military installations or activities will not be responsible for nor provide funds to maintain any public highway.
  - b. When an installation commander believes that highway deficiencies justify

relief through maintenance or improvement, the responsible State or local highway agency will be informed. An information copy of correspondence stating the

2 - 2

#### 15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

problem will be sent to major command for Army, Air Force, and Defense activities; and to Naval Facilities Engineering Command (NAVFAC) for Navy.

Major Army commands will send copies to MTMC. Assistance on Federal highway policy can be obtained from the proper Federal Highway Division Administrator (app A). If the State or local highway agency cannot or will not correct the deficiencies under its regular highway program, the installation commander will submit a report of the installation's access road needs.

- 2-8. Reports and investigations of highway facilities. Access road needs reports and investigations of public highway facilities should not be prepared by consultants. If so, the component of the headquarters of the Defense agency or the military department must approve. FHWA will evaluate and investigate the public highway facilities on request of the Commander, MTMC. When necessary and approved, and a consultant prepares a needs report, a draft of the report will be sent to the component of the headquarters of the Defense agency or the military department for approval before to final submission. The headquarters will coordinate these matters with the Commander, MTMC.
- **2-9. Coordination.** When another agency (military installation, activity, or Defense industry) uses, or has an interest in, a highway recommended for improvement, coordinate with the local representative of that agency and make a combined report. The combined report covering all required information for all such facilities will be sent through command channels to the Commander, MTMC. As an exception, it may be determined locally that separate reports are more desirable.
- **2-10.** Access road needs report (RCS MTMC-75). a. Access road needs reports will be narrative. Each report will describe, in detail, all factors and conditions which influence highway transportation needs and deficiencies. Where traffic congestion is the main problem, reports will not be prepared until the installation commander determines that control measures are unfeasible or inadequate. Examples of control measures are share-the-ride programs, mass transit, and staggering of work hours.
- b. Each report will include a record of discussions and correspondence with State or local highway agencies and other interested public official.
- c. National Guard Bureau reports will clearly define ownership (i.e. State or Federal) of existing and proposed facilities at the installation.
- **2-11. Who will prepare reports.** Reports will be prepared under the direction of the installation commander or the officer who is over an existing or a planned installation or activity or Defense industry. For installations that have no commanders and public highway facilities serving them are inadeqate, reports will be prepared by the following:
  - (1) Army. The district engineer of the Corps of Engineers.
- (2) Navy. The commander or commanding officer of the appropriate Engineering Field Division, NAVFAC.

- (3) Air Force. The commander of the base on which the installation depends for support or by the major command.
- 2-12. Report preparation and channels. a. Army reports will be prepared according to this section. They will be sent, with comments, through the major command to the Commander, MTMC.
- b. All Navy reports will be coordinated within a command, according to instructions issued by that command. Two will be sent through channels (including from the proper Engineering Field Division, NAVFAC) to the Commander NAVFAC.
- c. All Air Force reports will be coordinated within the command, according to instructions issued by that command. Two copies will be sent through channels to HQ USAF (AF/LEE).
- d. All other Defense agencies' reports will be prepared according to this section. Two copies will be sent to the headquarters of the Defense agency.
- e. All National Guard reports will be prepared according to this section. Two copies will be sent, with comments. through appropriate National Guard channels to the Chief, National Guard Bureau. Reports on access roads, including replacement roads, will include the information listed in table 3-1.

2-3

AR 55-80/OPNAVINST 11210.1B/ 15 December 1982 AFR 75-88/MCO 11210.2C/DLAR 4500.19

#### 2-13. Information to be included in reports.

# Table 3-1. Information To Be Included in Access Road Report

Explanation Date of preparation Self explanatory. Name and locatioin Include county or counties where installation located. Show all access roads and related highways. Maps: a. Vicinity map Show in color the location and extent of reported deficiencies. b. Site plan Show all entrance and exit gates and hours of operation. c. General site plan Show existing facilities and programed improvements. For National Guard installations, clearly show federally owned and State owned facilities and improvements. Status of installation: Include present and potential. a. Mission

b. Construction program

Show current, authorized, and proposed.

Personnel data:

a. Military or civilian strengths (work

Include present, projected (also dates of changes), and mobilization strengths.

force)

b. Number of contractor employees and construction workers. if applicable

Self-explanatory.

c. Installation residents

Self-explanatory.

- (1) Number of officers living in bachelor's officer's quarters (BOQ).
- (2) Number of enlisted personnel living in barracks.
- (3) Family housing information on officers and enlisted personnel living on the installation other than BOQ and barracks.
- (4) Number of personnel (including dependents) living in housing units or trailers.
- d. Origin and destination of Include when important. personnel

e. Working schedules

f. Availability and use of military and commercial bus service

Give number of shifts, working hours of each shift, and number of personnel per shift. When appropriate, include other mass transit services that may be available.

Traffic data:

For traffic volume data, show average weekday conditions. Make all counts on the same clay if possible. Show the exact location of traffic count.

2 - 4

# 15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

Table 3-1. Information To Be Included in Access Road Report-Continued

Item

Explanation

a. Twenty-four-hour volume at each gate

Count the following classes of vehicles.

- (1) Passenger vehicles, pickup trucks, and similar light vehicles.
- (2) Buses and two-axle trucks (except those in (1) above).
- (3) Multiaxle trucks and truck combinations.
- (4) Special purpose vehicles (such as forklift trucks and tracked vehicles).

b. Peak period volume, in 15-minute increments, at each major gate.

Identify the hours and increments comprising the peak period.

c. Hazardous cargo vehicles and dimensions and axle or truck-load characteristics

Give detailed information

d. Frequency of vehicles exceeding 64.000 pounds gross vehicle weight

Give detailed information

e. Vehicles that are more than 96 inches wide, 150 inches high, or 55 feet long, regardless of weight.

Give detailed information.

f. When significant, traffic accident Include locations, dates, types (i.e., fatality statistics

injury, or property damage), and causes.

g. Vehicle registration

Identify number of vehicles registered on the installation.

Type and condition of access road:

Detailed data on access road characteristics and engineering analysis of their adequacy are not required.

a. Type of construction

Such as gravel or concrete.

b. Width

Include pavements, medians, shoulders, and sidewalks.

c. Condition of roadway

For example, poor or good.

d. Horizontal and vertical alinements Include curves and grades.

e. Traffic control devices

Such as signals, signs, and markings

f. Other appropriate comments

Access road deficiencies

Briefly describe all known deficiencies. Show the restrictions, existing or potential, which affect the efficient operation of the installation at the present time pr in the foreseeable future.

Include some of the more common deficiencies which justify improvements under the Defense Access Road Program. Include inadequate traffic capacity, roadway design, or structural characteristics (i.e., location; surface type, width, or condition; bridges and drainage facilities; curves and grades), and railroad grade crossing protection.

# Table 3-1. Information To Be Included in Access Road Report-Continued

Item

Photographs

If appropriate, include in the report to identify physical deficiencies in the access roads. If available, send aerial photographs.

Explanation

Comments and recommendations Include as appropriate.

- 2-14. Where to send reports. Reports will be sent to the component of the headquarters of the Defense agency or the military department. The headquarters will review the reports for compliance with this regulation and determine the agency's funding capability for foreseen improvements. When appropriate, the report will be sent to the Commander, MTMC, who will de termine if the needs warrant a field evaluation. If so, the Commander, MTMC will request the FHWA to evaluate the public highway needs of the Defense installation or activity. The FHWA will advise the Commander, MTMC, of any improvements warranted, the estimated cost, and State or local highway authorities' plans for improvements. The FHWA will also advise the Commander, MTMC, if access control is needed to protect the project from obsolescence. (Sometimes it is desirable to acquire limited access when possible and where uncontrolled adjacent development and additional intersections would reduce the traffic carrying capacity of the roadway below that required to meet the military need.)
- 2-15. Funding. Defense agencies and the military departments will do the following:
- a. Program, budget, and finance for access road requirements through their military construction programs.
- b. Submit an apportionment request for each fiscal year that covers estimated requirements for unfunded, prior year, and current and foreseen needs.
- $\it c.$  Transfer apportioned funds to the FHWA according to the eligibility determinations and the certifications of public highway needs by the Commander, MTMC.

## Section III. REPLACEMENT ROAD NEEDS

- **2-16. General.** a. The establishment of new Defense installations or activities, or the expansion of existing ones, may require public highways to be closed or relocated. The Defense Access Road Program provides a means for Defense agencies to finance the cost of replacing roads. A road will not be replaced when other highways in the area can handle the traffic and when the cost of constructing a new road cannot be economically justified.
- b. A replacement road need not be of the same kind. However, participation under the Defense Access Road Program will be limited to right-of-way for, and construction of, the same number of traffic lanes as the old road being closed.
- **2-17. Procedures and funding.** Standard procedure for reporting and funding for replacement road needs is the same as for access road needs. Follow the procedures section II. this chapter.

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

# CHAPTER 3 MANEUVER-AREA ROADS

- 3-1. Maneuver-area road condition report (RCS MTMC-76). When a maneuver or a field exercise of military forces has been ordered and will require the use of maneuver-area roads (glossary) within CONUS, inform CG, FORSCOM, ATTN: AFEN-FEB. (The total strength must be or exceed that of a ground division.) A small exercise is usually carried out within the confines of military reservations and does not require abnormal use of public roads. FORSCOM will inform the proper Federal Highway Division Administrator (app A) and send a copy to the Commander, MTMC. Information will include the approximate start and end date of the maneuver, the types and characteristics of vehicles to be used, and a map showing the maneuver area limits and the public roads to be used. Representatives of the major Army command (MACOM), and appropriate State or local highway authority will jointly inspect the public roads before and after the maneuver. This in sures coordination of information which will be included in DA and FHWA reports.
- **3-2. Who will prepare report.** When there may be abnormal use of, or damage to, public highways in the maneuver-area, CG, FORSCOM, and the FHWA's Division Administrator (app A) will prepare Maneuver-Area Road Condition Reports. The FORSCOM report will be sent to the Commander, MTMC. The FHWA report will be sent through channels established by that agency.
- **3-3. When to send report.** The Maneuver-Area Road Condition Report will be sent in two parts:
- a. Pact A-Before Maneuvers. This part of the report will be sent after the joint inspection and before the maneuver. It will include the following:
- (1) Copies of all correspondence between highway and military representatives;
- (2) General information (such as the type and condition) on highways in the area of the maneuver;
- (3) Information developed by highway and military representatives on roads which may require improvement or extraordinary maintenance before or during the maneuver.
- b. Pact B-After Maneuvers. This part of the report will be sent as soon as possible after the maneuver. It will include general information on the use of public highways in the maneuver area. It will also include information based on the final inspection of highways and highway facilities which were improved or maintained because of the maneuver, or which need restoring to premaneuver condition. Technical details are not required. They will be part of the FHWA's report to the Department of Defense.
- 3-4. Certification of maneuver area. Based on review and analysis reports and

the recommendations of the FHWA, the Commander, MTMC, will, if appropriate, certify the maneuver area (23 USC 210(c)). This is the authority for payments to the FHWA and the State or local highway agencies for services and work. The letter of certification will also contain procedures for such payments. A copy of this letter will be sent to the CG, FORSCOM.

- **3-5. Funding**. a. Maintenance and repair of public highways used for maneuvers will be paid from funds available to the military department for the maneuver. These funds will also be used to reimburse the FHWA and the State or local highway agencies for the cost of maneuver road inspections. All payments to the FHWA must include an additional percentage for administrative costs.
- b. Each maneuver or field exercise area plan involving public highway usage will be identified to MTMC. MTMC will be informed early enough so that precondition and postcondition survey costs can be estimated as well as potential road damage costs. MTMC will assist the installation, MACOM, or military service so that these costs can be included in their initial budgetary requirements for the exercise or maneuver. If two or more marches (groups of vehicles)

3 - 1

AR 55-80/OPNAVINST 11210.1B/ 15 December 1982 AFR 75-88/MCO 11210.2C/DLAR 4500.19

or movements of a maneuver or exercise over public highways are 3 or more days apart, then a precondition and postcondition survey will be made for each.

- c. Claims for payment for damage to public highway facilities of not more than \$25,000 may be settled administratively (10 USC 2733). Public highway maintenance and repair costs more than \$25,000 will be paid under 23 USC 210(c).
- d. To insure prompt repair of manuever-area road damage, Commander, MTMC, may authorize the FHWA to temporarily use available access road funds, pending payment from operation and maintenance funds to the FHWA.

3 - 2

15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

# CHAPTER 4 SPECIAL DEFENSE USE OF PUBLIC HIGHWAYS

- **4-1. General.** Special Defense use of public highways is subject to the laws and regulations of the States and political subdivisions. This does not apply for overriding and urgent military necessity.
- 4-2. Military vehicle-highway relationships. a. Highways today are designed to serve the national defense for many years. However, their functional (geometric) clearance and other physical makeup still may have limitations. Legal limits can be exceeded by a reasonable amount when there is good reason; however, when scientifically established physical limitations are exceeded, it reduces the effectiveness of a highway. It may also increase maintenance for its continual use and cause permanent damage. This will require the highway to be reconstructed. Highways and bridges are not expendable and, if seriously damaged or destroyed, they cannot be repaired or replaced during a major emergency, except for isolated cases.
- b. A few special purpose and tactical military vehicles must be developed that are larger or weigh more than legally permitted on public highways. Accordingly, during the development of land vehicles which exceed the criteria in AR 70-44/OPNAVINST 4600.22B/AFR 80-18/MCO 4610. 14C/DLAR 4500.25, the transportability agencies will inform the Commander, MTMC, of the proposed vehicles. The length, width, height, axle spacing and load, gross weight, type, size and pressure of tires, and turning radius will be included. The Commander, MTMC, will furnish comments and recommendations to the transportability agency. Established joint policies and official working relationships with States will be explained in the comments.
- c. The transportability agency will inform Commander, MTMC, when standardization is started on vehicles that, when transporting a load for which designed, exceed the aforementioned limitations and criteria. This applies to all items transported on highway vehicles. The nature of the vehicles or items and the

numbers that may be procured will be given. This will insure that proper action is taken on the design and the use of public highways.

- d. In developing vehicles, materiel, or components of materiel, the agency will keep the contractor informed of sizes and weights that are not to be exceeded.
- **4-3. Special military movements.** *a.* Military movements over public highways that exceed legal size or weight, or any other special military movement, will comply with paragraph 1-6.
- b. To request permits for oversize, overweight, or other special military movements on public highways, and report on movements that cannot be made, see AR 55-162/OPNAVINST 4600.11D/AFR 75-24/MCO 4643.5C/DLAR 4540.8. That regulation cites a directory of individuals in each State and DOD who will be contacted for permits. The Commander, MTMC, prepares and publishes the directory.
- c. The policy of the American Association of State Highway and Transportation Officials, during peacetime, designates DOD to be the sole certifying agency for all movements declared essential to the national defense. During a national emergency, movements would be far greater in scope. Therefore those not under direct control of the military departments or Defense agencies would be certified by the proper emergency transportation authority.
- d. The Commander, MTMC, will develop and coordinate policy and related procedures for special military movements on public highways. This will be done in cooperation with the American Association of State Highway and Transportation Officials and the FHWA.
- e. When the type or frequency of military movements are expected to damage public highways, follow procedures in chapter 3.

#### 4-4. Emergency highway traffic regulation.

a. During a national emergency, civil authorities may have to regulate traffic on public highways for safe and quick movements of priority personnel

4-1

# AR 55-80/OPNAVINST 11210.1B/ 15 December 1982 AFR 75-88/MCO 11210.2C/DLAR 4500.19

and materiel (Executive Order 11490). This may require regulating movements through dangerous areas or clearing priority traffic over routes of limited capacity. Regulating the traffic insures the highest degree of highway use under adverse conditions. This will be done on routes only where and when traffic demand exceeds traffic capacity. This will also be done in restricted areas where and when highway users must be protected from exposure to radiological or other hazards. The main function of highway traffic regulation is to allocate available road space to meet movement priorities.

- b. Emergency highway traffic regulation requires close cooperation of the Federal Government, the State highway departments, State and local police, and highway users, including the military.
- (1) The FHWA will develop a national program to effectively regulate emergency highway traffic.
- (2) The Commander, MTMC, will insure that FHWA integrates the operational requirements of the military departments into this national program. MTMC will inform DCSOPS, DA promptly of any actual or foreseen interference with military operational requirements.
- (3) State authorities will develop plans to regulate emergency highway traffic in their area. These plans must be within the general guidelines of the national

program. State authorities will:

- (a) Estimate highway capacities,
- (b) Provide information on the location and intensity of hazards,
- (c) Determine available routes in their highway network, and
- (d) Provide for police enforcement.
- (4) Local plans implement and supplement the State's organization and plan.
- (5) At State and local levels, the highway user groups will be permitted under established national priority guidelines, to operate over regulated highways.
- (6) As directd by CG, FORSCOM, each CONUS Army commander and senior Army commanders for Alaska and Puerto Rico will prepare plans for their installations and activities to take part. The plans will contain responsibilities and guidance for the installation on taking part in emergency highway operations. CG, Western Command, will prepare plans for installations and activities in Hawaii.
- (7) Upon request from the CONUS Army, commanders of DOD installations will provide responsible and knowledgeable people to represent the military at State and local levels.

4 – 2

15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

# CHAPTER 5 HIGHWAY TRAFFIC ENGINEERING

- **5-1. General.** Traffic engineering studies are used to develop highway for national defense policies and to determine the scope of highway requirements, including Defense access roads. They are also a means for the installation to receive engineering expertise to solve traffic operational and planning problems. The Army, Navy (including the Marine Corps), Air Force, and Defense agencies and their installation commanders may use traffic engineering services in solving on-installation traffic problems.
- **5-2. Traffic engineering services.** a. MTMC traffic engineering services relate to the functional aspects of highway transportation facilities. They

are available in CONUS and overseas. Traffic engineering includes planning, geometric design, safety, and analysis of traffic operations. It also includes the need for access roads serving military installations. Traffic engineering studies range from a brief reconnaissance for providing prompt verbal guidance, to a comprehensive report for developing a safe and efficient transportation system. Traffic engineering studies are made to collect and collate data and to analyze it and to prepare recommendations for Defense access roads, operation and maintenance, and military construction programs. Traffic engineering services available are as follows:

- (1) Advice and assistance on resolving limited problems. This may be done by telephone or a letter.
- (2) Reconnaissance studies which require a 1 to 3-day field visit to analyze problems of limited scope.
- (3) Intermediate studies which require a 3 to 5-day field visit to analyze several problems.
- (4) Comprehensive studies which require about a 2-week field visit to analyze the entire transportation system (operational and planning).
- (5) Review of installation plans, concepts, and proposals for new transportation or traffic-generating facilities before final site selection and design.
- (6) Assistance in contracting for commercial traffic engineering services. This includes-
  - (a) Establishing scope,
  - (b) Monitoring the progress,
  - (c) Reviewing the final report, and
  - (d) Helping to implement recommendations.
- (7) Special studies which include subjects such as research, development of criteria and standards and technical guidance manual; multimodal studies; and motor and rail outloading studies.
- b. Before requesting traffic engineering studies for minor problems caused by peak-hour congestion or other short term impacts, the installation must try standard traffic reducing operations. This includes programs to increase ridesharing and, when mission allows, dispersing duty hours. Army installations will use AR 210-4 as a reference for carpooling and vanpooling programs. MTMC will provide assistance when requested. Refer to MTMC publication sources in appendix B. To get copies, write Director, Military Traffic Management Command, Transportation Engineering Agency, ATTN: MTT-TE, P.O. Box 6276, Newport News, VA 23606.
- c. Every effort should be made for employees to use mass transit facilities (both on-installation and off-installation) when possible.
- d. Traffic engineering studies are not substitutes for access-road needs reports (chap 2, sec II) prepared by installation commanders. Also, they are not substitutes for evaluation reports of the public highway needs of military installations by the FHWA.
- e. MTMC's objective is to provide the most effective traffic engineering service practicable; however, limitation of authorized manpower resources may preclude prompt response to all requests. When this happens, preference will be given to requests for the service in a(1), (2), and (6) above. This service

is the most effective and productive use of available resources, both in providing prompt relief and in solving urgent short-range problems and in meeting the more urgent needs for comprehensive studies. When traffic engineering type services in a(4) above are provided by military service contracts, MTMC contractual guidance service (a(6) above) should also be used.

- f. Studies listed in a above can be effective in implementing Federal drives to conserve energy and reduce use of private and administrative vehicles (Executive Order 12191).
- **5-3.** Installation support of traffic engineering services. a. The installation commander will provide assistance to the MTMC project officer during a traffic engineering study. The type and amount of assistance varies according to the scope of the study. Mandatory items include-
- (1) Travel funds. Enough funds to cover transportation costs for MTMC project engineer to and from and in and around study site.
- (2) Per diem. Enough funds for local per diem costs during entire study period.
- (3) Manpower. Nontechnical personnel to assist the project engineer in collecting data. The more comprehensive studies could require about 20 people.
- (4) Office space. Adequate working space for project and support personnel to hold briefings and tabulate traffic data.
  - b. Items which may be requested are as follows:
    - (1) Aerial observation and photographic flights,
  - (2) Printing of forms,
  - (3) Personnel and housing statistics,
  - (4) Additional transportation support, and
  - (5) Traffic accident data.
- c. Traffic engineering services will be budgeted early so that adequate funds may be available at the time of the study.

# 5-4. Traffic Engineering Needs Report (RCS MTMC-98(RI)) (DD Form 1948).

- a. General. To request traffic engineering services, except as cited in paragraph 5-2a(1), (5), and (6), use DD Form 1948 (fig 5-1). The report shows the priority, scope of study needed, and reason for traffic engineering services. The data are used to prepare a master schedule for each fiscal year. The schedule contains the most urgent DOD traffic engineering needs. Traffic engineering services in paragraph 5-2a (1), (5), and (6) can be obtained by writing or calling MTMC, Military Traffic Management Command, Transportation Engineering Agency, ATTN: MTT-TE, P.O. Box 6276, Newport News, VA 23606, Phone 804-595-9032 or AUTOVON 8-927-4641. (Fig 5-1 is on fold-in pages and is located at the end of the regular-size pages.)
  - b. Preparing agencies.
- (1) The organization most familiar with the local problems will prepare DD Form 1948 for each study request. Preferably, it will be the engineering or law enforcement organization at installation level. Make urgent requests by telephone and follow with DD Form 1948.
- (2) The final review authority (paras 1-16, 1-17, and 1-18) will evaluate all requirements within his or her respective department or agency. A numerical priority rating will be assigned to each request.
- $c.\ Form\ supply.$  With the exception of the Air Force DD Form 1948 will be reproduced locally on 81/2 by 11-inch paper, head to foot, in accordance with figure -1. Air Force activities will obtain forms through publications supply channels.
- d. Frequency, routing, and die date. DD Form 1948 may be submitted more than once and at any time; however, all study requests for a particular fiscal year will be sent through the final review authority (para 1-16, 1-17, and 1-18) to

the Director, MTMCTEA, ATTN: MTT-TE, by I July of the preceding fiscal year. Negative reports are required from agencies within CONUS.

- e. Preparation instructions. Report processing instructions are on the back of the form. In item 8, fully describe the problem. Include data which could be applicable, such as-
  - (1) Expected personnel changes.
  - (2) The most heavily used access and installation roads,
  - (3) Traffic volumes and accident data,

5-2

#### 15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

- (4) Traffic classification (trucks vs. cars),
- (5) Hazardous cargo routes,
- (6) Land use changes,
- (7) Traffic restrictions,
- (8) Condition of roads, and
- (9) Recommendations.
- f. Reviewing authority.
- (1) When appropriate, intermediate commands will review individual study requests for accuracy, needs, and urgency. If the request is unwarranted, it will be returned to the installation with appropriate comments.
- (2) Based on the information provided in the requests, the reviewing authority will rank them according to other department or agency requirements. 5-5. Publication on solving highway prob
  - g. Master schedule.
- (1) On receipt of the annual report, MTMC will compile a master list showing all DOD requirements in order of need. If the situation described in paragraph 5-2e exists, a master schedule will be prepared based on the scope of work developed for each requirement from analysis of the requests. The master schedule will show the quarter of the fiscal year during which each requirement is expected to be initiated. It will be coordinated with and given to all DOD components on completion.
- (2) To request additional studies or changes in desired dates or scopes of scheduled studies, send a revision to the summary list. All changes must be received 60 days before the effective date of the change.
- **5-5.** Publication on solving highway problems. Appendix B contains a list, of publications that provide assistance in resolving basic traffic engineering and highway problems.

## HIGHWAY SAFETY PROGRAM STANDARDS 12 AND 13

#### Section I. REQUIREMENTS

- **6-1. General.** Highway safety program standards that apply to Federally-administered areas, as outlined in 23 CFR 1230, will be implemented within DOD.
- **6-2.** Highway safety plans. Each installation commander, having control over an on-base road network will develop a highway safety plan. The goal will be to reduce deaths, injuries, and property damage caused by traffic accidents.
- a. An action plan will be prepared as part of the program. It will require the following:
- (1) Identifying potentially hazardous locations, such as sharp curves, steep grades and railroad grade crossings, and developing corrective measures. The implementation of HSPS 9, Identification and Surveillance of Traffic Accident Locations, will help identify high accident locations.
- (2) Eliminating the conditions noted during routine operation surveillance of the roadway system to rapidly adjust for the changes in traffic and road characteristics. This is a means to reduce accident frequency or severity.
- (3) Planning, designing, and constructing highway projects using accepted traffic engineering standards and principles. This will include improvements that increase survivability when drivers lose control of their vehicles. Examples are: Elimination of roadside obstacles, breakaway sign supports, and impact attenuators.
- (4) Reviewing road projects during the planning, designing, and constructing stages to detect and correct features that may lead to operational safety difficulties.
- (5) Maintaining highways so that they are at the highest reasonable level of safety consistent with the changing traffic the facility serves.
- (6) Inspecting highway maintenance and construction areas that must remain open to traffic to insure that necessary safety precautions have been taken. Also, any facility that has been closed to traffic during construction will be inspected before opening.
- (7) Evaluating the effectiveness of traffic safety measures in reducing the frequency and severity of traffic accidents. To do this, detailed records of highway physical features and accident statistics will be maintained.
- b. An implementation plan will be prepared to correct safety deficiencies. Priorities will be assigned to improvements. This can be done by either selecting certain routes-for overall improvements or by selecting types of hazards and correcting them systematically. Priorities will require the following:
- (1) Stating the goals of the program in terms that lend themselves to evaluation of progress.
- (2) Considering the impacts that are expected to result from each proposed improvement. The expected reduction in deaths and injuries of each improvement will be evaluated and examined in relation to its cost and the benefits of other proposed improvements. The effects on traffic factors (such as capacity, volumes, and speeds) will also be considered in setting priorities.
  - (3) Scheduling the correction of any hazards within a reasonable time.
- **6-3. Manpower development plan.** Each installation commander, having control over an onbase road network, will develop and maintain a comprehensive manpower development plan. It must provide the necessary traffic engineering capability and basic instruction in traffic engineering techniques for subprofessionals and technicians. It must also provide for upgrading the

skills of practicing installation traffic engineers. Qualified professional traffic engineering expertise will be used in planning, designing, and constructing roadways to reduce traffic accidents. They will also be used in the maintenance of installation roadways and in the application of traffic control devices.

6-1

# AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

15 December 1982

- **6-4. Traffic control device plan.** Each installation commander, having control over an on-base road network, will develop and maintain a traffic control device plan. It will include
  - a. An inventory of all traffic control devices.
- b. Periodic review of existing traffic control devices. It will include a systematic upgrading of substandard devices to conform with standards issued or endorsed by the Federal Highway Administrator. It will also be in compliance with the Manual on Uniform Traffic Control Devices for Streets and Highways (app B).
- c. A maintenance schedule adequate for proper operation and timely repair of control devices. Daytime and nighttime inspections will be included.
- d. An identification of traffic control needs and short and long range requirements. Correction of safety problems in existing traffic control devices should be by routine maintenance and repair. New devices on Army installations will be installed with construction funds. (See AR 420-10 on classification of work.)
- e. An evaluation of the effectiveness of traffic control measures in reducing the frequency and severity of traffic accidents.
- f. The conduct of traffic engineering studies to establish realistic speed limits according to State and local legal requirements and guidelines.
- g. The application and evaluation of new ideas and concepts, when appropriate, in applying control devices and in the modifying existing ones to improve their effectiveness through controlled experimentation. Variances in the design and application of traffic control devices from standartls in the MUTCD will be sent through channels to Commander, MTMC, for review and approval.
- **6-5. Uses of accident data.** Accurate accident data, (para 6-2a(1)) tabulated and analyzed, may be used by traffic engineers as follows:
  - a. To define and identify high-acddent locations.
- b. To make before and after studies where improvements have been made or where specific control devices have been changed. These studies are very important in assessing the accident prevention value of signs, signals, markings, geometric design, illumination, and other traffic measures.
- c. To justify action, either positive or negative, on requests for installations of traffic control devices.
- d. To aid in evaluating different geometric designs, and in determining and developing proper design of streets, intersections, driveways, and traffic control devices to best accommodate local conditions.
- e. To establish ranking, programing, and scheduling of improvements at high-accident locations. This will be based on numbers (or costs) of accidents that can be prevented by traffic engineering measures.

- f. To justify costs for major improvements that offer effective accident reduction or prevention.
  - g. To develop changes in traffic regulations and zoning codes.
  - $h.\ {
    m To}$  identify need for improved police traffic surveillance.
  - i. To determine need for sidewalk and bikeway construction.
  - j. To determine need and justification for parking restrictions.
  - k. To determine need for improved roadway lighting.
- 1. To identify certain driver and pedestrian patterns causing accidents which might be prevented through public education.

#### Section II. IMPLEMENTATION AND EVALUATION

- **6-6. General.** a. Under delegation of authority from the Secretaries of the Army and Defense, the Commander, MTMC, maintains liaison with FHWA. MTMC also insures that the national program requirements for HSPS 12 and 13 are implemented.
- b. The MTMC, periodically sends the FHWA an evaluation summary of the HSPS 12 and 13 progress being made within DOD according to Public Law 89-564.

6-2

#### 15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

- c. All military installations with a working population of 1,000 or more will have a point of contact for traffic engineering matters. This person will coordinate implementation of HSPS 12 and 13.
- **6-7.** Highway safety program standard 12 (HSPS-12). HSPS 12 will be implemented by the agencies below.
- a. For the Army, the Chief of Engineers (para 1-16e(3)).
  - b. For the Navy, the Naval Facilities Engineering Command (para 1-17a(2).
- c. For the Air Force, HQ, USAF, Director of Engineering and Services, Office of Deputy Chief of Staff, Logistics and Engineering (para 1-18c and d).
- **6-8. Highway safety program standard 13 HSPS-13).** a. The Commander, MTMC, will coordinate the implementation of HSPS 13 within DOD with the FHWA and with other governmental and nongovernmental agencies.
- b. For the Army, the following will insure the timely implementation of HSPS 13 requirements into ongoing military programs. (See para 1-16 and 6-1.)
- (1) CG, US Army Forces Command (including the senior Army commanders, Alaska, US Army Western Command, Defense Complex, Panama, and Puerto Rico),
  - (2) CG, US Army Training and Doctrine Command,
  - (3) CG, US Materiel Development and Readiness Command,
  - (4) Military District of Washington, and
  - (5) CG, US Health Services Command.
- c. Other appropriate DOD components will incure the timely implementation of HSPS 13 of their respective Defense installations.
- d. All DOD components must comply with the current edition of the Manual of Uniform Traffic Control Devices (MUTCD) and FHWA approved supplements by dates shown in paragraph e below. Installation commanders will not install traffic control devices, other than those in the MUTCD, without permission of Commander, MTMC, in coordination with FHWA. Requests for waivers, exemptions, or supplements to the MUTCD will be forwarded to the Commander, MTMC, MT-SA.

Oversea installations normally comply with traffic control device standards of the host country.

- e. Traffic control device and compliance dates are as follows:
  - (1) Pavement markings, by end of 1982.
  - (2) Regulatory and warning signs, by the end of 1985.
  - (3) Traffic signals, by the end of 1986, and
  - (4) Guide signs, by the end of 1990.
- f. Compliance with the 1971 MUTCD is already required.
- **6-9.** Highway Safety Standards Report (DD Form 2265) (RCS MTMC-150). a. Each installation commander having a working population of 1000 or more employees (military and civilian) will send DD Form 2265 (Highway Safety Standards Report (RCS MTMCISO)) to MTMC by 1 November 1984 and every 2 years thereafter.
- b. For the Navy, activity commanders without control of any on-base road networks will not submit RCS MTMC-150 reports.
- c. For the Army, the following will correlate the interests of all their Defense installations and activities, review appropriate installation RCS MTMC-150 reports, and send them to MTMC. (See para 1-16 and 6-1.)
- (1) CG, FORSCOM (including the senior Army commanders, Alaska, WESTCOM, Defense Complex Panama, and Puerto Rico),
  - (2) CG, TRADOC,
  - (3) DARCOM
  - (4) Military District of Washington, and
  - (5) US Army Health Services Command.
- d. Other appropriate DOD components will review installation RCS MTMC-150 reports submitted by their installations and send them to MTMC. (See para 1-17,1-18,1-19, and 6-1.)
- e. Form supply: With the exception of the Air Force, DD Form 2265 will be reproduced locally on  $81/2\sim$  by 11-inch paper, head to foot, in accordance with figure 6-1. Air Force activities will obtain forms through publications supply channels.

6-3

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19 15 December 1982

- (Fig 6-1 is on fold-in pages and is located at the end of the regular-size pages.)
- **6-10. Funding.** Defense agencies and the military departments will program, budget, and finance for highway safety requirements through their own military service program.

#### APPENDIX A

# OFFICES OF THE DIVISION ADMINISTRATORS, FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

State Address

Alabama 441 High Street

Montgomery, Alabama 36104

Alaska Federal Bldg., 709 W. Ninth Street

Juneau, Alaska 99802

Mailing Address: P. O. Box 1648

Arizona 3500 N. Central Avenue, Suite 201

Phoenix, Arizona 85012

Arkansas Federal Office Building-Room 3128

700 West Capitol Avenue Little Rock, Akansas 72201

California Federal Bldg., Second Floor

800 I Street

Sacramento, California 94814 Mailing Address: P. O. Box 1915 Sacramento,

California 95809

Colorado P.O. Box 25406, Bldg. 25

Denver Federal Center Denver, Colorado 80225

Connecticut 990 Wethersfield Avenue

Hartford, Connecticut 06114

Delaware Federal Office Building

300 South New Street Dover, Delaware 19001

Mailing Address: P. O. Box 517
Dover, Delaware 19901

District of Columbia McLachlen Bldg

Room 1000

666 11th St., N.W. Washington, DC 20001

Florida Ackerman Building

223 W. College Avenue Tallahassee, Florida 32301 Mailing Address: P. O. Box 1079

Tallahassee, Florida 32302

Georgia 1422 W. Peachtree Street
Atlanta, Georgia 30309

Federal Bldg.

300 Ala Moana Blvd. Room 4119

Prince Jonah Kuhio Kalanianaola

Honolulu, Hawaii 96813

Idaho 3010 W. State Street Boise, Idaho 83703

Illinois 320 West Washington St., Room 700

Springfield, Illinois 62701

Indiana Room 245

A-I

Hawaii

575 N. Pennsylvania Street Indianapolis, Indiana 46204

Iowa 105 Sixth Street
Ames, Iowa 50010

Maillng Address: P. O. Box 627
Ames, Iowa 50010

Kansas 444 SE Quincy St., Room 240

Topeka, Kansas 66683

Kentucky John C. Wafts Federal Building and

US Courthouse

330 West Broadway Street Frankfurt, Kentucky 40601

Louisiana Federal Bldg., Room 239

750 Florida Boulevard

Baton Rouge, Louisiana 70801

Maine Federal Bldg., US Post Office

Room 614, 40 Western Avenue

Augusta, Maine 04330

Maryland The Rotunda, Suite 220

711 W. 40th Street

Baltimore, Maryland 21211

Massachusetts 100 Summer Street

Suite 1517

Boston, Massachusetts 02110

Michigan Room 211, Federal Building

315 W. Allegan Street Lansing, Michigan 48901

Mailing Address: P. O. Box 10147

Minnesota Metro Square Building

Seventh & Roberts Streets, Suite 490

St. Paul, Minnesota 55101

Nashville, Tennessee 37203

A-1

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19 15 December 1982

State Address

Mississippi 666 North Street, Suite 105 Jackson, Mississippi 39202

Missouri 209 Adams Street

Jefferson City, Missouri 65102 Mailing Address: P. O. Box 148

Jefferson City, Missouri 65102

Montana Federal Office Bldg.
301 S. Park, Drawer 10056
Helena, Montana 59601

Nebraska Federal Building, Room 487 100 Centennial Mall, North

Lincoln, Nebraska 68508

Nevada Suite 300

1050 E. William St.

Carson City, Nebraska 89701

New Hampshire Federal Building, Room 219

55 Pleasant Street

Concord, New Hampshire 03301

New Jersey Suburban Square Building

25 Scotch Road

Trenton, New Jersey 08628

New Mexico 117 US Court House

Santa Fe, New Mexico 87501

New York Federal Building, 9th Floor

Clinton Avenue and North Pearl Street

Albany, New York 12207

North Carolina 310 New Bern Avenue

P. O. Box 26806

Raleigh, North Carolina 27611

North Dakota Federal Building, P. O. Box 1755

Bismarck, North Dakota 58501

Ohio 200 North High St., Room 328

Box 15008

Columbus, Ohio 43215

Oklahoma Federal Office Bldg., Room 454

200 N.W. Fifth Street

Oklahoma City, Oklahoma 73103

Oregon The Equitable Center

Suite 100, 530 Center St., N.E.

Salem, Oregon 97301

Pennsylvania 228 Walnut Street

Wisconsin 53705

Harrisburg, Pennsylvania 17108
Mailing Address: P. O. Box 1086
Harrisburg,
Pennsylvania 17108

Puerto Rico US Courthouse and Federal Bldg.

Office 150, Carlos Chardon Street

Hato Rey, Puerto Rico 00918

Rhode Island Federal Building and US Post Office

Exchange Terrace, Suite 250 Providence, Rhode Island 02903

South Carolina 2001 Assembly Street, Suite 203

Columbia, South Carolina 29201

South Dakota Department of Transportation

Transportion Building

East Broadway

Pierre, South Dakota 57501

Tennessee Federal Bldg., US Courthouse

801 Broadway, Room A-926 Nashville, Tennessee 37203

Texas 826 Federal Office Building

300 East 8th Street Austin, Texas 78701

Utah Federal Bldg., 125 South State Street

Salt Lake City, Utah 84111

Mailing Address: P. O. Box 11563 Salt Lake City,

Utah 84147

Vermont Federal Building

Montpelier, Vermont 05602

Mailing Address: P. O. Box 568

Montpelier, Vermont 05602 Virginia Federal Building, 10th Floor

400 N. 8th Street

Richmond, Virginia 23240

Mailing Address: P. O. Box 10045

Richmond, Virginia 23240

Washington Evergreen Plaza Building

711 S. Capitol Way

P. O. Box 29

Olympia, Washington 98501

West Virginia Courthouse and Federal Office Building

500 Quarrier Street

Charleston, West Virginia 25301

Wisconsin 4502 N. Vernon Boulevard

Madison, Wisconsin 53705

Mailing Address: P. O. Box 5428

Madison, Wisconsin 53705

Wyoming O'Mahoney Federal Center

2120 Capitol

Cheyenne, Wyoming 82001

Mailing Address: P. O. Box 1127

Cheyenne, Wyoming 82001

A-2

15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2CIDLAR 4500.19

# APPENDIX B REFERENCE PUBLICATIONS ON SOLVING HIGHWAY PROBLEMS (BIBLIOGRAPHY)

- A Policy on Design of Urban Highways and Arterial Streets, American Association of State Highway and Transportation Officials, Washington, DC. 1973.
- A Policy on Geometric Design of Rural Highways, American Association of State Highway Officials, Washington, DC. 1965.
- \*Development and Maintenance of Traffic Control Devices Inventories for DOD Installations, MTMC Pamphlet 55-11, Headquarters, Military Traffic Management Command, 1 September 1978.
- \*Do's and Don'ts for Transportation Master Planning, MTMC Pamphlet 559, Headquarters, Military Traffic Management Command, 1 May 1976.
- Highway Safety Program Manual, Volume 12, Highway Design, Construction, and Maintenance, US Department of Transportation, Federal Highway Administration, Washington, DC, 1974.
- Highway Safety Program Manual, Volume 13, Traffic Engineer-Services (Traffic Control Devices), US Department of Transportation, Federal Highway Administration, Washington, DC, 1974.
- Introduction to Transportation Engineering, Institute of Transportation Engineers, Washington, DC, 1978.
- Manual of Traffic Engineering Studies, Institute of Transportation Engineers,

- Arlington, VA, 1976.
- Manual on Uniform Traffic Control Devices for Streets and Highways, US Department of Transportation, Federal Highway Administration, Washington, DC. 1978.
- \*Mastering Ridesharing, MTMC Pamphlet 5516 Volume II, Headquarters, Military Traffic Management Command, Washington, DC. October 1980.
- Presidential Executive Order 12191. "Federal Facility Ridesharing Program," and Implementing Department of Defense (DOD) Memorandum for Assistant Secretaries of the Army, Navy, Air Force, and Defense Agency Directors from OASD (MRA&L) subject: DOD Management of On-Base and Local Administrative Motor Vehicle Transportation, 13 May 1980.
- \*Traffic Engineering for Better Roads, MTMC Pamphlet 55-10, Headquarters, Military Traffic Management Command, Washington, DC, June 1978.
- \*Traffic Engineering for Better Signs and Markings, MTMC Pamphlet 5514, Headquarters, Military Traffic Management Command, March 1981.
- \*Traffic Engineering Study Reference, MTMC Pamphlet 558, Headquarters, Military Traffic Management Command, 1 April 1976.
- Transportation and Traffic Engineering Handbook, Institute of Traffic Engineers, Prentice Hall, Inc., Englewood Cliffs, NJ, 1976.
- \*Traffic Engineering for Better Gates, MTMC Pamphlet 55-15, Headquarters, Military Traffic Management Command.

B-1

15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

## GLOSSARY

Access road. An existing or proposed public highway from a military reservation, defense industry, or activity to suitable transportation facilities. (This may include public highways through military installations when they are dedicated to public use and, by fee simple or easement, are owned, operated, and maintained by civil authority.)

**Defense access road.** A road that is to be improved, in whole or in part, with Federal funds (23 USC 210).

Defense highway safety program. A program initiated by Congress and approved by the Secretaries of Transportation and Defense. It is designed to reduce traffic accidents and deaths, injuries. and property damage. The program applies to all Federally-administered areas that have roads "open to public travel," including military installation roads. (See sec. 402, title 23, United States Code and part 1230, title 23, Code of Federal Regulations.)

<sup>\*</sup>Available from MTMC upon request. Send request to: Director, Military Traffic Management Command, Transportation Engineering Agency, ATTN: MTT-TE, P. O. Box 6276, Newport News, VA 23606.

**Defense industry.** An industry important to the national defense for producing materiel or

equipment. Normally, it is-

- a. Largely or wholly owned or leased by the US Government, or
- b. Has many Government-owned buildings or equipment on the site; or
- c. In some cases, and especially during full mobilization, has total production capacity, under contract, over an extended period to produce items essential to the national defense.
- Emergency highway traffic regulation (EHTR). A regulation that contains plans, routes, and schedule of the actual use of highways to help the orderly flow of traffic during a national emergency. This includes evacuation, regulating movement through dangerous areas, and clearing priority traffic over routes of limited capacity.
- Federal aid primary system. A connected system of interstate highways of about 250,000 miles. Each state selects them through its state highway department. This is subject to mileage limitations prescribed by Federal law and the approval of the Secretary of Transportation.
- Federal aid secondary system. A system of roads without statutory mileage limitations of about 635,000 miles. The state highway departments and local road officials select these roads. This is subject to limitations prescribed by Federal law and the approval of the Secretary of Transportation. (These routes may include farm-to-market, county, and township roads and extensions into urban areas.)
- Federal aid urban system. A system of arterial and collector routes. It excludes urban extensions. The Federal aid priinary system.
- Highway system needs. Needs for devvelopment and maintenance of public highway system which DOD should recommend to the Federal Highway Administration (FHWA), Department of Transportation, and individual State Departments of Transportation. These particular highways are of major transportation importance to the national defense.
- Installation road. A road or street within a military reservation or in which the DOD has a real estate interest. It is not dedicated to public use and is not eligible for improvement with defense access road funds.
- Maneuver area road. A public road within an area or connects areas. Usually it is outside military reservation boundaries and is delineated by official departmental orders for field maneuvers or military exercises equal to a ground division. Because of such exercise, the road may be damaged beyond that of normal civilian and military usage.
- National System of Interstate and Defense Highways (NSIDH). A limited system of highways in the United States of 42,500 miles as established by law. Highways are to be located so as to connect-
- a. By routes, as direct as practicable, the principal metropolitan areas, cities, and industrial centers to serve the national defense, and
- b. At suitable border points with routes of continental importance in the Dominion of Canada and the Republic of Mexico.

Glossary 1

AR 55-80/OPNAVINST 11210.1B/
December 1982
AFR 75-88/MCO 11210.2C/DLAR 4500.19

15

Other highway systems. Recognized public highways, such as officially dedicated highway networks of States and political subdivisions, other than those of the NSIDH, Federal aid primary, secondary, or urban systems.

Replacement road. A public road that must be built to replace a public highway or street that has been, or will be, closed to public use because of the following-

- a. Construction or expansion of a military installation or defense industry, or
- b. Security or safety requirements of these installations.

Roads "open to public travel". Roads on military installations where dependents, visitors, and other members of the public are permitted access.

To have identification to enter a road does not exclude it from being a road "open to public travel."

Special defense use of public highways. Any defense related use of public highways, bridges, and tunnels (including toll facilities). It is as follows-

- a. Exceeds any legal limitations, functional traffic capacity, or other
  design limitations; or
  - b. Presents unusual hazards to other users, or
- c. Requires unusual routing or giving priority to military vehicles or cargo. Traffic engineering. That phase of engineering which deals with planning, geometric design, and traffic operations of roads, streets, and highways. It includes their networks, terminals, abutting land, and relationships with other modes of transportation, for safe, efficent, and convenient movement of persons and goods.

Glossary 2

15 December 1982

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19

The office of primary interest in this joint publication is the Military Traffic Management Command. Users are invited to send comments or suggested improvements to Commander, Military Traffic Management Command, ATTN: MT-SA, WASH DC 20315. Army users will use DA Form 2028 (Recommended Changes to Publications and Blank Forms).

By Order of the Secretaries of the Army, the Navy, and the Air Force, and the Director, Defense Logistics Agency

E. C. MEYER

General, United States Ar~~y
Chief of Staff

# Official:

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

JAMES D. WATKINS
Admiral, United States Navy
Chief of Naval Opemtions

#### Official:

H. F. BOYLE, JR.

Commodore, United States Navy Assistant Vice Chief of Naval Operations, Director of Naval Admimstration

CHARLES A. GABRIEL
General, United States Air Force
Chief of Staff

#### Official:

JAMES L. WYATT, JR.
Colonel, United States Air Force
Director of Administration

#### Official:

H. A. HATCH

Lieutenant General, United States Marine Corps
Deputy Chief of Staff for Installations and
Logistics

R. F. McCORMACK Colonel, United States

Army

Staff Direct or,

Adrninistration, DLA

AR 55-80/OPNAVINST 11210.1B/ AFR 75-88/MCO 11210.2C/DLAR 4500.19 15 December 1982

# DISTRIBUTION:

Army:

Active Army, ARNG, USAR: To be distributed in accordance with DA Form 12-9A requirements for AR, Transportation and Travel-D

Navy: One copy of each unless otherwise noted

SNDL	Al	(Immediate Office of the Secretary)
	A4A	Chief of Navy Material (5)
	Aб	Headquarters US Marine Corps
	21A	Fleet Commanders in Chief
	FA	(Shore Activities under CINCLANTFLT)
	FB	(Shore Activities under CINCPACFLT)
	FC	(Shore Activities under CINCUSNAVEUR)
	FE	(Shore Activities under COMNAVSECGRU)
	FG	(Shore Activities under COMNAVTELCOM)
	FH	(Shore Activities under BUMED)

FKA (Shore Activities under CNM less FKA1@) FKAIC (NAVFACENGCOM (25) (Activities under NAVFACENGCOM) FKN FKPI (Shore Weapons Activities) FKO (Shore Activities under NAVELEXSYSCOM) FKR 1 (Activities-Aircraft) FSI (NAVINTCOM) FTI (CNET) FT2 (CNATRA) FTS (CNTECHTRA) FT6 (Air Stations CNET) FFI (Naval District Washington DC) FFS (Safety Center) FF19 (Support Activity CNO) Op's 09B, 03, 04, 05, 06, and 094

# Stocked:

CO, NAVPUBFORMCEN 5801 Tabor Avenue Philadelphia, PA 12120

# Air Force: F

#### Marine Corps:

2005/3700001, 002, 004, 009/6025/ MAR CORPS CODES:

6901002/73 15 (10)

7000162, 164/8145004, 005 (2)

Defense Logistics Agency: 3.

U.S. GOVERNMENT PRINTING OFFICE: 1982-381-661-403/3195

TRA	AFFIC ENGINEER	IŅG NEEDS RE	PORT		RE	PORTS CONTROL SYMBOL MTMC-98(R1)
HRU: (Department or	agency) -	AGENC ATTN: M P. Q. BOX	ANSPORTATION :Y :TTTE			(Instaliation mailing address: nan street, city, state, zip code)
NAME OF INSTALLA	TION PROJECT OFF	ICER (Last, First,	M.I.) 2. PHO	NE NO. (AUTOV	ON)	3. BUILDING NUMBER
(YYMMDD)  PURPOSE OF EVALU	S. DATE DESIRED (YYMMDD)	RECOI	NAISSANCE MEDIATE	COMPRE		
a. PLANNING SUPPOR	ROGRAMS:		HER PLANNING	(apeci(y)		
MC FY	LINE ITEM	OTHER CONST	RUCTION FY_	(specify)		
TRAFFIC CIP	OCATION(S) ENTRANCES AD(S) DN(S) CENTER	OTHER	RANSIT : CONTROL DEV		- n	OCCURRENCE — HOURS:  A. M.  NOGN  P. M.  ON-PEAK
	·					
JUSTIFICATION:						
JUSTIFICATION:						
						(Use additional sheet if require

DD FORM 1948

EDITION 1 JUL 74 IS OBSOLETE

Figure 5-1. Traffic Engineering Needs Report (DD Form 1948).

```
GENERAL NOTE FOR PERSONNEL PROCESSING THIS REPORT: Items marked with an asteriak (*) have been registered in the
```

- A. PURPOSE AND SCOPE. The report indicates the priority, scope of study required, and justification for traffic engineering services requested. The data are used to prepare a master schedule for each fiscal year, which contains the most greent DOD traffic engineering pending
- 8. PREPARATION INSTRUCTIONS. The following specific guidance is furnished for preparing DD Form 1948:

\*Installation mailing address.

- item 1. \*Name of Installation Project Officer. Self-explanatory.
- Item 2. Phone Number (AUTOVON). Self-explanatory.
- Item 3. Building Number. Enter building number of project officer.
- item 4. \*Date of Request, Self-explanatory.
- item 5. \*Date Desired. Enter desired date for completion of study.
- Item 6. \*Scope of Evaluation. Consult paragraphs 7-2a(1) through 7-2a(7) of Joint Regulation AR 55-80.
- Item 7. \*Purpose of Evaluation.
- a. Manning Support. Check if the evaluation is in support of the master plan or in support of other planning. Specify what the other planning is, such as regional transportation planning, operational planning, etc.
- b. Construction Programs, Check "MC" if the evaluation is in support of a military construction (MC) project(s), and indicate the fiscal year of the schedule project. Check "Other" if the evaluation is in support of construction other than MC (such as nonappropriated funds), and indicate the fiscal year in which it is scheduled. Also specify what the other construction is.
  - c. Operations. Check one or more of the following:
- "Traffic Circulation" Check whether the problem(s) involves traffic flow over the roadway system (i.e., congestion, turning movements into and out of service entrances, etc.).
- "Accident Location(s)" Check whether the problem(s) involves a location(s) which experiences a high frequency of accidents. (The definition of "high frequency" depends on the volume of traffic, number of lanes, etc. A general guidance which can be used to determine whether a location should be considered for evaluation as a high frequency accident location is any location on a two-lane highway which experiences three or more accidents per year.)
  - "Gates or Entrances" Self-explanatory.
  - "Access Road(s)" Self-explanatory.
  - "Intersection(s)" Self-explanatory.
  - "Community Center" Self-explanatory.
  - "Speed Limit" Check if the problem involves identification of proper speed limits.
  - "Parking" Check if the problem involves lack of available parking space,
  - "Mass Transit" Self-explanatory.
  - "Traffic Control Devices" Self-explanatory.
  - "Other" Check if the problem involves other than the problem(s) above.
  - "Time of Occurrence" Self-explanatory.
- Item 8. Description of Problem(s). Describe the problem in narrative form. In addition, other data which could be included when applicable are: anticipated personnel changes, an indication of the most heavily used access and installation roads, traffic volumes and/or accident data, traffic dassification (trucks vs. cars), an indication of the use of routes by hazardous cargo vehicles, traffic restrictions, condition of roads, and recommendations.
- item 9. Justification. Justify request for study. Recommend a priority and provide facts justifying the priority. Classifications are as follows:

# Priority Description Problem affects the mission of a combat unit. Problem affects the mission of a combat support unit. Problem affects the mission of a combat support unit. Problem affects the safety of personnel. (Any problem which has resulted in three or more lost time injuries and/or deaths over a 1-year period.) Any requirement in support of a construction project scheduled for the current or upcoming fiscal year. Problem affects the welfare and convenience of personnel. (Any problem which has resulted in three or

- 6 Any requirement in support of planning or military construction other than that covered in priority four.
- Item 10. Numerical Ranking. Indicate the order of need for the requirement as it ranks with other requirements within the department or agency, and the fiscal year during which the service is required. (Order of need will range from "one" to a number equal to the number of department or agency requirements for the fiscal year.)

more noninjury accidents, substantial delays, and/or inconvenience to personnel.)

C. GENERAL INSTRUCTIONS: (1) When appropriate, intermediate commands will review individual study request for accuracy, need, and urgency. Comments supporting the requirements may be added by indorsement to the transmittal letter or by additions to the report itself. If the request is found to be unwarranted, it should be returned to the installation with appropriate comments. (2) Based on the information provided in the requests, the review authority will indicate the order of need for the requirements as it ranks with other department or agency requirements, and will indicate a fiscal year the evaluation is required.

HIGHWAY SAFETY S	TANDARDS REPORT		REPORTS C	MC·· 15		1BOL	
THRU: (Department or agency)	TO:		FROM: (Installatio	n mai	ling ada	iress:	name.
	COMMANDER MTMC TRANSPOR AGENCY ATTN: MTT-TE P. O. BOX 6276 NEWPORT NEWS,	TATION ENGINEERING	<i>stre∉t</i> , ci	ty, stat	e. zip c	code)	
INSTALLATION CHARACTERISTICS     Employment population     Military Civilian		b. Approximate paved ro					
c. Number of intersections with traffic si	gnals	(do not include patro					
2. QUALIFICATIONS OF PERSON RESPONSANCE (Last, First, M.I.)	NSIBLE FOR TRAFFIC EN	24-hour operation GINEERING b. Job Title	parr-time	<u>operatio</u>	90		
c. Installation mailing address ( $Name$ , $str$	eet, city, state, zip code)	d. Phone Number AUTOVON					_
Formal education/training in traffic an (Name of School)	gineering Type T				YMMD	plete	- -
f. Annual manhours devoted to traffic el	ngineering	g. Does this person have on Uniform Traffic C and Highways (MUTC	antrol Devices for St	17815	YES	0	NO.
3. TRAFFIC CONTROL DEVICES a. Does a traffic control device inventory b. If no, is an inventory presently progra c. Has the MUTCD been used by your i d. If yes, are plans programmed to upgr e. Approximately, now often are pavemen	immed for the future? (if y installation to identify nonst ide these devices? (if yes, c int markings repainted at your 2 years make periodic adjustments to	es, completion date (YYM) andard traffic control devic ompletion date (YYMMDD) ur installation? every 3 years or more o traffic signal timings at	signalized intersections	, 0		a aaa	00 00 00 00 00 00 00
ACCIDENTS OCCURRING ON INSTALL     Are accident records maintained for bo     If no, which accident records are main     What dollar value must damage exceed     What was the number of accidents for	oth DOD vehicles and private stained?	rted?		 	YES		NO
property damage only e. is an accident spot map maintained at f. How many installation locations had 5 g. Have other potentially hazardous locations	the installation? or more accidents during t	ne past fiscal year?	rossings) been identifi		YES YES	_	NO NO
SAFETY IMPROVEMENTS     a. If applicable, are safety improvements fiscal year?     b. If applicable, are safety improvements c. When traffic engineering projects are p. AASHTO State    AASHTO State	programmed for other pote	ntially hazardous locations?		ӓ	YES YES		NO NO
None, solely based on experience d. Are traffic engineering projects reviews committee? e. Are "after" studies conducted to evalu	d during the planning, desig	in, and construction stages			YES		NO NO
6. COMMENTS/REMARKS (if necessary, att	ach supplemental pages)						
		÷					
7. NAME OF PERSON COMPLETING FOR	M (Last, First, M.I.)	8. JOB TITLE		9. D	ATE (Y	YMA	(ממו
10. SIGNATURE		11. PHONE NUMBER					

# INSTRUCTIONS FOR COMPLETING DD FORM 2265

PURPOSE AND SCOPE. Public Law 83—564 requires all Government agencies operating highway systems to comply with Highway Safety Program Standards (HSPS) issued by the Secretary of Transportation. Standard Number 12 is entitled "Highway Design, Construction and Maintenance," and Standard Number 13 is entitled, "Traffic Engineering Services" (formerly "Traffic Control Devices"). This report is to determine the scope of the Defense HSPS Program and to achieve compilance with the requirements of HSPS 12 and 13. Sased on the information the Public Law (89—564).

GENERAL INSTRUCTIONS. When appropriate, intermediate commands will review individual report submissions for assuracy and content.

Comments may be added by indorsement to the transmittal letter or by additions to the report itself. If the report is found to be incomplete, it should be returned to the installation with appropriate comments.

- Item 1. INSTALLATION CHARACTERISTICS. Complete such sub-item with appropriate data.
  - 1a. Employees only: exclude dependents. Average number of year-round contract personnel should be included with civilian employees.
  - 10. Mileage of streets should include all paved primary and secondary streets except for remote training area. All tertiary streets are excluded. Primary and secondary streets are defined in TM 5—822—2 and AFM 89—7. Exclude all streets maintained by local and state agencies. Mileage estimated from maps is sufficient.
  - 1c. Do not include those intersections with flashing beacons or other warning signal devices.
  - 1d. Gates or entrance points on installation boundary only; not interior security gates.
- Item 2. QUALIFICATIONS OF PERSON RESPONSIBLE FOR TRAFFIC ENGINEERING. Complete each sub-item with appropriate data.
  - 2a thru 2d, Self-explanatory
  - 2s. If college graduate, list degree. In addition, list traffic engineering courses not included in college carriculum, such as short courses attended at Northwestern University, Georgia institute of Tachnology, and the University of Maryland.
  - 2f. Traffic engineering generally includes activities involving road-way improvements and design: traffic control devices such as pavement markings, signs, channelization, and signals; and parking. The percent of time and man-hours annually devoted to traffic engineering should include only activities associated with design and management of factors concerning installation traffic items.
- item 3. TRAFFIC CONTROL DEVICES.

  Complete each sub-item by marking appropriate block and completing blanks with appropriate data.
  - 3a. Inventory definition is contained in Section VII of MTMC Pamphiet No. 55-4.
  - 3b thru 3g. Self-explanatory.

- item 4. ACCIDENTS OCCURRING ON INSTALLATION ROADS.
  Complete each sub-item by marking appropriate block and completing blanks with appropriate data.
  - 4s and 4b. Self-explanatory.
  - 4c. Prefer damages be defined in dollar value if possible.
  - 4d. Include all on and off-street accidents that exceed the amount indicated in item 4c. Each accident should be reported only once and classified in the most serious category that applies. Do not include off-installation accidents.
  - 44. Self-explanatory.
  - 4f. The term locations means an intersection of two or more receivarys or a short section (1,000 feet or less) of continuous roadway.
  - 4s. Self-explanatory.
- Item 5. SAPETY IMPROVEMENTS
  Complete each sub-Item by marking apprepriate block and completing blanks with appropriate data.
  - \$4 and \$6. Self-explanatory.
  - Sc. AASHTO is aeronym for American Association of State Highway and Transportation Officials,
  - 5d and Se. Self-explanatory.
- item 6. COMMENTS/REMARKS. Comments/remarks should include estimates of percent of compliance with Highway Safety Program Standard (HSP3) 12, and with HSP3 13, if possible. (Example: Estimated Percent Compliance HSPS 12

items 7 thru 11. Self-explanatory.

GENERAL NOTE FOR PERSONNEL PROCESSING THIS REPORT: Items listed below have been registered in the DOD DATA ELEMENT PROGRAM.

INSTALLATION MAILING ADDRESS DATE NAME OF PERSON COMPLETING FORM

TRA	AFFIC ENGINEER	IŅG NEEDS RE	PORT		RE	PORTS CONTROL SYMBOL MTMC-98(R1)
HRU: (Department or	agency) -	AGENC ATTN: M P. Q. BOX	ANSPORTATION :Y :TTTE			(Instaliation mailing address: nan street, city, state, zip code)
NAME OF INSTALLA	TION PROJECT OFF	ICER (Last, First,	M.I.) 2. PHO	NE NO. (AUTOV	ON)	3. BUILDING NUMBER
(YYMMDD)  PURPOSE OF EVALU	S. DATE DESIRED (YYMMDD)	RECOI	NAISSANCE MEDIATE	COMPRE		
a. PLANNING SUPPOR	ROGRAMS:		HER PLANNING	(apeci(y)		
MC FY	LINE ITEM	OTHER CONST	RUCTION FY_	(specify)		
TRAFFIC CIP	OCATION(S) ENTRANCES AD(S) DN(S) CENTER	OTHER	RANSIT : CONTROL DEV		- n	OCCURRENCE — HOURS:  A. M.  NOGN  P. M.  ON-PEAK
	·					
JUSTIFICATION:						
JUSTIFICATION:						
						(Use additional sheet if require

DD FORM 1948

EDITION 1 JUL 74 IS OBSOLETE

Figure 5-1. Traffic Engineering Needs Report (DD Form 1948).